THE REPUBLIC OF TURKIYE
SMALL AND MEDIUM ENTERPRISES DEVELOPMENT ORGANIZATION OF TURKIYE

(KOSGEB)

Türkiye Green Industry Project

(PROJECT NO: P179255)

TERMS OF REFERENCE FOR RECRUITMENT OF AN IT SPECIALIST

Project Component:	*Support Industrial SMEs to improve their energy and resource performance and reduce their carbon emissions*
Project Subcomponents:	*Subcomponent 1.1: Solar energy investments by Industrial SMEs* *Subcomponent 1.2: Mobilizing industry for a clean and circular economy*
Procurement Plan No:	*CS-INDV-10*
Duration of Assignment:	12 Months
Type of Consultancy:	Individual Consultancy
Procurement Method:	Individual Consultant Selection
Country / City	Türkiye / Ankara

BACKGROUND

"Türkiye Green Industry Project" is a project managed and financed by the World Bank, implemented with three separate components by the Ministry of Industry and Technology (MoIT), the Small and Medium Enterprises Development Organization of Türkiye (KOSGEB) and the Scientific and Technical Research Council of Türkiye (TÜBİTAK).

The main purpose of the project is to support an efficient green transformation for industrial companies in Türkiye.

The Türkiye Green Industry Project is a critical initiative to support the Turkish government's efforts to transition to a green economy. The project will provide financial assistance to help small and medium-sized enterprises (SMEs) adopt green technologies and practices. This will help SMEs reduce their environmental impact and improve their competitiveness in the global market.

Green transformation of Turkish economy and industry; In addition to establishing inclusive and sustainable growth, the steps to be taken in this field to protect and strengthen our country's competitiveness in exports to third countries, especially the EU, are also important in terms of improving our country's integration into global value chains and increasing its share from international investments.

The project aims to improve the capacities of industrial enterprises for environmental

sustainability, competitiveness, investment opportunities, digitalization and assurance in resource supply, and to contribute to meeting their priority needs and environmental awareness and more efficient consumption of resources.

Component 1: Support industrial SMEs improve their energy and resource performance and reduce their carbon emissions, which will be managed by KOSGEB and aims to provide reimbursable financing for investments in solar energy, resource efficiency, and circular economy.
Component 2: A Contingent Emergency Response Component to be managed by KOSGEB in the event of an eligible crisis or emergency, in line with World Bank Policy: Investment Project Financing
Component 3: Support the Green Innovation of Industrial Enterprises, which will be managed by TÜBİTAK and aims to provide matching grants and reimbursable financing for green firm-level and platform-level innovation (product and process).
Component 4: Project management and institutional development, which will be managed by DGI of MoIT and aims to coordinate project activities, define an eligible green technology taxonomy, provide technical assistance to MoIT and partners, qualify and certify green transformation experts, establish a green knowledge management system for industries, and provide awareness to firms about the project's activities and results.

The Small and Medium Enterprises Development Organization of Türkiye (KOSGEB) provided a loan from the World Bank to finance the expenses within the scope of the Türkiye Green Industry Project. Part of this loan will be used for the payments of this contract.

The subcomponent to be carried out by KOSGEB consists of the following sections:

Component 1: Support Industrial SMEs to improve their energy and resource performance and reduce their carbon emissions

The aim of this component is to tap into the potential of industrial SMEs for energy efficiency and renewable energy. More specifically, this component will support industrial SMEs in investing in solar energy for their own consumption, developing and implementing green transition plans to reduce carbon emissions and improve their resource efficiency, with a focus on energy, water, and waste management efficiency.

Subcomponent 1.1: Solar Energy Investments by Industrial SMEs
The aim of this subcomponent is to decarbonize energy systems in industrial activities, raise awareness among industrial SMEs about the use of environmentally friendly and climate-resilient technologies, and improve the competitiveness of SMEs by reducing their energy costs.

Subcomponent 1.2: Mobilizing Industry for a Clean and Circular Economy
The aim of this subcomponent is to contribute to the development of SMEs' capacities for climate action and sustainability, increase their competitiveness, open green and climate investment opportunities, digitalization, and assurance in resource supply, and to meet their priority needs for resources efficiency and reduction of the industry's carbon footprint in terms of tCO2e/t produced.

Component 2: Contingent Emergency Response Component (CERC)

It is important to note that KOSGEB can only activate this component in the event of a future emergency. This component has been added to accelerate the rapid activation of credit processes in emergency situations. Mutual understanding and agreement between KOSGEB and the World Bank are important in using this component effectively.

Overall, the Contingent Emergency Response Component is an important tool that facilitates the World Bank's ability to provide rapid financial support during crises or emergencies. This component enables the use of uncommitted balances from existing projects to meet immediate needs and support the affected country's recovery efforts.

JOB DESCRIPTION

IT Specialist for Component 1 of our project; He/she will oversee and execute all aspects of information technology and systems appropriate to the objectives of the project. It will make a critical contribution to ensure the smooth functioning of IT-related activities and the successful implementation of technological solutions and to continuously improve its operation. In this position, by reporting to the Deputy Project Coordinator and the Project Manager within the Project Implementation Unit (PIU) and coordinating with the IT Specialists.

DUTIES AND RESPONSIBILITIES

The IT Specialist, who will work in close cooperation with the Project Implementation Unit manager, will be responsible for:

- Making technical analyzes and designs of software applications for which business analyzes have been made
- Conducting unit tests and preparing technical documentation
- Following up and resolving the findings regarding the developed applications
- Providing technical inputs to improve the planning, development and implementation of KOSGEB's KBS Platform Monitoring, Payment, Integration and Reporting Module software application
- Testing the necessary technical analyzes during the KBS Platform development phase together with the Project Implementation Unit (PIU).
- Providing cooperation and coordination with relevant departments of KOSGEB, PIU members and other consultants assigned for the loan, and supporting them within the scope of their job descriptions.
- Performing other duties that may be assigned by the PIU Coordinator within the scope of the Job Description.
- Ensuring that national legislation and the above-mentioned responsibilities and duties are properly followed and complied with, and reporting duties and other duties are delivered on time,

DURATION AND LOCATION OF EMPLOYMENT

The project duration is 6 years. The planned start date of the Individual IT Specialist is the second quarter of 2024. Contracts will be issued annually and there is a 2-month trial period. The Individual IT Specialist will be employed with flexible work schedule

(max. 8 hours/day, max. 40 hours/week). Contracts may be renewed depending on the needs of the Administration, the performance of the consultant and the status of the financial source. Consultant services will be provided at the Administration's service building at Hacı Bayram Mah İstanbul Cad No: 32 Ankara or at other locations to be agreed upon by the parties.

REQUIRED SKILLS AND EXPERIENCE

General Qualifications:

- Graduating from computer engineering, software engineering, electronics engineering, electrical-electronics engineering, and industrial engineering departments of the faculties or from higher education institutions abroad whose equivalence is accepted by the Council of Higher Education,
- Having at least two years of experience in the implementation of monitoring and evaluation (M&E) systems
- Having at least 5 years of experience in Microsoft Enterprise products (Visual Studio, C#, .Net Framework, MS SQL, Reporting services, etc.) and documenting this.

Reasons for Preference:

- Having knowledge and experience in monitoring & evaluation software development projects
- Experience in writing functional and technical requirements of the IT tools and Data Modelling
- Having knowledge about OOP, SOLID principles, data structures, algorithms, multi-layered software architectures and design patterns,
- Having developed applications with relational databases and having good knowledge of SQL and/or T-SQL,
- Experience with Azure Devops, CI/CD processes and Git,
- Having knowledge about Agile software development processes,
- Having knowledge and experience in container architecture, Kubernetes, Docker,
- Having knowledge and experience in application development with .NET Framework and MVC Design Pattern,
- Having knowledge and experience in relational database management systems (RDMS) such as MySQL, PostgreSQL, SQL Server etc.
- Having knowledge and experience in application development with .NET Core,
- Having knowledge and experience about RESTful, WCF Web Services,
- Having knowledge and experience in Enterprise Software Architecture, ORM (Entity Framework, Dapper),
- Having knowledge and experience in software security and secure software life cycle,
- Having knowledge and experience about MicroService architecture,
- Having knowledge and experience about user identification and authorization methods and technologies (OAuth2, Single Sign On (SSO), Electronic Signature, Mobile Signature),
- Being able to keep up with the intense and stressful work tempo,
- Being suitable for teamwork, solution-oriented, disciplined and open to development.

ESTIMATED BUDGET AND PAYMENT TERMS

The budget of the work subject to tender will be determined by the contract and payments will be made to a bank account to be determined by the Consultant within 15 (fifteen) days following the submission of the freelance receipt/invoice to be issued by the Consultant at the beginning of the month following the completed month.